

OLIVE-SIDED FLYCATCHER (*Contopus cooperi*)

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Criteria Scores

Population Trend	Range Trend	Population Size	Range Size	Endemism	Population Concentration	Threats
15	0	5	5	0	0	30

Special Concern Priority

Currently considered a Bird Species of Special Concern (breeding), Priority 2. Not included on the original list (Remsen 1978).

Breeding Bird Survey Statistics for California

California is one of 3 western North American states that have highly significant ($p < 0.01$) negative long-term (1966-1996) trend estimates for olive-sided flycatcher populations, with 4.0%/yr declines (Sauer et al. 2000). Nationwide Breeding Bird Survey (BBS) data collected through 1996 indicated that California showed the highest abundance of olive-sided flycatchers (4.8 birds per route) (Altman and Sallabanks 2000). BBS data collected from 1968 – 1979 revealed that the numbers of breeding olive-sided flycatchers in western North America had dropped dramatically, but populations remained stable in areas of the species' greatest abundance (Robbins et al 1986). From 1986 to 1989, olive-sided flycatcher numbers dropped in California, but stabilized between 1980 and 1989 (USFWS unpublished analysis). In 1987 the olive-sided flycatcher was placed on the USFWS list of Migratory Nongame Birds of Special Concern (USFWS 1987b).

General Range and Abundance

Olive-sided flycatcher is generally recognized as a monotypic species, although western birds are slightly larger than eastern (Altman and Sallabanks 2000). Adopting the latest change from *Contopus borealis* to *C. cooperi*, Pyle (1997) followed Todd (1963) and recognized the subspecies *C. cooperi marjorinus* and *C. c. cooperi*. Breeds from western and central Alaska and western

McKenzie, ranging in a central band that covers the breadth of Canada from coast-to-coast; south along the west coast of the US to central California, and the interior mountains to northern Baja and the south western US. East of the Rocky Mountains, olive-sided flycatchers breed from southern Canada, north and northeastern U.S. to eastern Tennessee and western North Carolina. *Winters* in southern Mexico, casual in southern California, sparsely in Central America south through Ecuador and Peru to Bolivia and southeastern Brazil. *Migrates* mainly through the most of the western U.S. and Central America, less commonly in the eastern U.S. (AOU 1998). *Abundance*: Global trends suggest a population decline, with North American Breeding Bird Survey (BBS) data indicating declines across much of North America since 1966; significant overall decline of 70% (3.6%/year) from 1966 to 1999, 53% (3.7%/year) from 1980 to 1999 (Sauer et al. 2000).

Seasonal Status in California

Summer resident, April through September.

Historical Range and Abundance in California

Grinnell and Miller (1944) described the olive-sided flycatcher as a “common” summer resident in forested areas the entire length of the state except the Central Valley and eastern deserts, from near sea level on the coast, to 9400 ft. (2865 m) elevation in forested areas. Bent (1942) noted records of this species from elevations up to 11,000 feet (3353 m) in the San Pedro Martir Mountains, in southern California. Summer range in California is from the extreme north coast in Del Norte County, east to the Warner Mountains in Modoc County, from the Oregon state line south, through the higher coastal ranges and the Sierra Nevada to southern Tulare County. In southern California, patchily distributed across forested areas of Santa Barbara County south east through San Diego County. Generally absent from the Central Valley floor, except in migration.

Recent Range and Abundance in California

The general outline of the breeding range today remains largely unchanged (Grinnell and Miller 1944). Non-BBS censusing data from southeast Farallon Island indicate significant declines in

both spring and fall migrants over 25 year period, between 1968-1992 (Pyle et al. 1994). Although California supports more olive-sided flycatchers than other U.S. state; statewide they are in decline with a significant overall decrease of 70% from 1966 to 1999 (Sauer et al. 2000).

Ecological Requirements

Optimum habitats are considered to be late-successional forests with 0-39% canopy cover (Verner 1980). In Douglas fir (*Pseudotsuga menziesii*) forests in nw. California, olive-sided flycatcher is the only common species detected more often at forest edges than in forest interior (Rosenberg and Raphael 1986). In the Sierra Nevada, more abundant in open mixed-conifer and red fir (*Abies magnifica*) forest than in closed-canopy forest (Beedy 1981). Within the conifer forest biome, olive-sided flycatchers are most closely associated with edges, openings, natural and man-made clearings, or semi-open forest. For foraging, prefers unobstructed airspace within forest clearings, semi-open forest, and over forest canopies where there are exposed perches (Altman and Sallabanks 2000). Lofty perches are required, for foraging and singing-posts (Grinnell 1944). Typically, these perches are the apical tips of emergent snags that protrude above the surrounding canopy. Altman (1999) observed that most foraging bouts were initiated from the upper third of trees or snags: males, 91% ($n = 55$); females, 72% ($n = 53$); unknown sex, 89% ($n = 55$). The olive-sided flycatcher diet is composed almost entirely of insects, 83% of which is bees and wasps, indicating a very high degree of specialization (Beal 1912, $n = 69$). Nest construction is undertaken primarily, if not totally by the female, where nest building usually takes about 5 days (Wright 1997). Nests are placed on the upper surface of a branch, well away from the trunk, in a cluster of live needles and twigs (Harrison 1979).

Threats

Habitat loss or alteration may be the most important threat to the olive-sided flycatcher. Marshall (1988) found that some species of forest breeding birds, including olive-sided flycatchers on Redwood Mountain in Tulare County, California, in the 1930s were no longer present in the 1980s,

although portions of virgin sequoia (*Sequoiadendron giganteum*) forest within Kings Canyon National Park remained. Marshall (1988) also speculated that the disappearance of olive-sided flycatcher from suitable, unchanged habitat was caused by the destruction of corresponding forests in Central America, where these birds maintain their winter territories. On the breeding grounds, removal of snags during logging operations reduces preferred nesting and habitat structures. Studies show that olive-sided flycatchers are more abundant in some types of logged forest, especially those where suitable habitat structure is retained (Altman and Sallabanks 2000). Olive-sided flycatchers show a high degree of specialization for hymenopterans and other particular types of flying insect prey (Altman and Sallabanks 2000). Inclement weather that potentially limits vulnerable prey items could reduce fitness or breeding success during the nesting season. Weather events such as heavy gusts of wind or hail storms have been reported to cause nest failures among other open-cup nesting flycatchers such as the Willow Flycatcher (*Empidonax traillii*) [Sanders and Flett 1987]. On rare occasions, olive-sided flycatchers are hosts to nest parasitism by brown-headed cowbirds (*Molothrus ater*) [Friedmann 1963].

Management and Research Recommendations

- retain suitable snags during timber harvest and post-burn salvage operations.
- Retained trees should be of variable heights, with some at or above the adjacent forest canopy level (Altman 1997).
- selectively burn or patch-cut forests in known breeding areas.
- conduct more research on the habitat & adjacent habitat structure requirements and ecological conditions governing habitat selection.
- Identify areas of high concentrations of individuals on the wintering grounds so that management approaches may sustain these populations.

- conduct studies to assess the rates and extent of habitat loss on the wintering grounds in the Caribbean, Central and South America.
- assess the effect of agricultural pesticide use on the wintering grounds.

Monitoring Needs

The results from the establishment of more BBS routes in the olive-sided flycatcher's range would provide more information on statewide population trends. More intensive, site-based studies such as the MAPS program (DeSante 1992) color banding, and censusing would be valuable in gaining more information on longevity, movements, and population dynamics.

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